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The Country of the Tekke Turkomans, and the Tejend and Murghab Rivers.

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Map, p. 576.*

I.

In April 1880 I left Constantinople for Persia, travelling by Trebizond, and through Armenia. At the time I passed through Armenia the famine in the land was terrible. When I approached a village, the first sight I saw was the whole of the women and children out in the fields collecting crocus bulbs, dandelions, and grass, to eat. I was glad to get away from a place where it was so dreadful to see suffering which one was unable to alleviate. There was no food for the people, and small gifts of money, which was all I was able to bestow, were nearly useless. I went from Erzerum by Bayazid to Khoi in Persia, visiting many of the battle-fields of the late war between Russia and Turkey *en route*, and passing over some of the Kurd country whence Shaik Obidullah later drew a portion of the troops with which he invaded Persia. I travelled from Khoi past the Lake of Urumiah to Tabriz and Teheran, and from Teheran to Ispahan. At Ispahan I remained for two months and a half, residing in the Armenian suburb of Julfa. I had determined to visit Daragez, and here I made my preparations.

Daragez is a district of the Persian province of Khorasan. It is

* A large portion of this map is laid down from surveys made by Lieutenant-Colonel Stewart himself, much of it having not been previously surveyed. The parts of Khorasan unvisited by him are taken from the map of that province by Major the Hon. G. Napier, and the parts in the new Trans-Caspian province of Russia, from the Russian map of 1881. The country on the Tejend and Murghab rivers is laid down from information carefully collected from the Turkomans by Lieutenant-Colonel Stewart. For the portion of Afghanistan which appears, the map of Major-General Walker has been consulted.

situated across the mountain range which elsewhere forms the boundary of North-Eastern Persia. As Daragez projects into the Tekke Turkoman country it is a good place from which to gain information of that tribe. The best road from the country of the Akhal Tekke to the country of the Merv Tekke passes through the district. I knew that if I travelled as an Englishman, as Colonel Baker and Captain Gill had done, I should not be able to collect information, as I should be watched and have a guard with me, who, as the Persians would say, were furnished to do me honour and protect me, but who, I knew, would have positive orders to prevent my holding free and independent communication with the Turkomans in Daragez, and that if I was permitted to have any intercourse with Turkomans it would only be with such as would tell me what the Persian governor wished I should be told.

I had on one of my previous visits to Persia been at Julfa, and I knew it to be a good place at which to make preparations for my journey. I here hired two Armenians to accompany me on my travels, one as a sort of partner and clerk, the other as a servant. I determined to travel as an Armenian horsedealer of Calcutta. I had been in Baghdad and Mesopotamia, and knew the ways of the Bombay horsedealers who visit those places. This knowledge now stood me in good stead. As the price of horses has risen very high in Baghdad some of these men visit Persia, and travel as far as Mash-had on horsedealing expeditions; and I found one party had actually been to Mahomadabad in Daragez before me, which of course smoothed matters for me. I procured two suits of Armenian clothes, and a black lambskin hat. I left Ispahan on the 30th of September, dressed as an Englishman, ostensibly to travel in Western Persia, but after marching in that direction about one march and a half, I turned round and steered by compass for Nain, leaving all roads. I had not even told my partner and servant exactly where I was going, as I thought the best way for me to keep the secret was not to let them know. When I came to a desert place I changed my clothes, and threw my hat, which could not be hidden, down a karez or underground canal. I had chosen the character of an Armenian horsedealer from Calcutta because I thought I could sustain that rôle better than any other. I had travelled much in Asiatic Turkey and in Persia, and knew Oriental ways. The Armenians of Calcutta have chiefly come from Julfa in Persia, and it was one of these Armenians that I determined to personate. I dressed just as a well-to-do Armenian would have done. My partner and servant were Armenians who had visited India, and could speak Hindustani. We ordinarily spoke Persian, but if I wanted to say anything private I spoke to them in Hindustani; the bystanders then imagined we were speaking Armenian. If by chance any one who had visited India understood what was passing, which was very unlikely, there would be nothing curious in an Armenian horse-

dealer from India speaking the language of that country. Any peculiarity in my accent when speaking Persian would be put down to my having learnt it in India. My only fear was that I might chance to meet real Armenian traders, but I knew they seldom visit Daragez, as they are too much afraid of being carried away and sold as slaves by the Turkomans.

The first town I reached was Nain, celebrated for its faience in ancient times, and even now the pottery made in this town is the best manufactured in Persia. I did not enter the town, as I did not yet feel confidence enough in my new dress to face the Persian officials who would probably have interviewed me. I heard that the road from Nain to Tabbas across the Kavir or Great Salt Desert was very difficult, in consequence of the want of water, and that the road, though difficult, was better by Ardakan. I therefore went to Ardakan, which is a place of some 20,000 inhabitants, situated not far from the Kavir or Great Persian Salt Desert. A road leads from Ardakan across the desert, which is used by pilgrims from Southern Persia to the Holy Shrine of Imam Reza at Mash-had. At this season the pilgrim caravans are not very numerous, as the heat in the desert is still very great, and this is the time when there is least water. Rain rarely falls in Southern Persia except in the winter months, and no rain had fallen in this part of the country for six months, so the *hoaz* or reservoirs for water on the road were generally empty, and water only remained at places where there were natural springs, which were rare and far apart.

Ardakan is surrounded by high walls of the most flimsy description. They look exactly as if they were made of the sort of gingerbread known as "parliament," and they were cut into a serrated pattern at the top, which still further increased their resemblance to gingerbread. These walls are, however, only meant to resist an attack of people unprovided with artillery, so they are sufficient. Ardakan carries on a good trade with India, and many of the people have visited that country in the course of business. I stayed at the caravanserai in this town, and was not recognised in any way. Within a few miles of Ardakan, the desert country commences, and in every direction there is nothing but barren, stony hills, and equally barren plains. Many of these hills are of a peculiar colour. They are generally composed of a hardened clay, and have a curious red appearance, being stained with ferruginous oxide. The explanation of this peculiar colour, I believe to be that each grain of clay of which the mountains are composed is coated with a very thin pellicle of peroxide of iron.

The first march from Ardakan was to a village called Homin, 30 miles over a very desert country. Homin was a pretty little oasis in the desert, watered by a tiny spring. Wherever water can be found, every sort of fruit flourishes; pears, apricots, apples, and walnuts abounded in this place. A very fine variety of ibex is plentiful near Homin.

I procured some of the horns, and hope to get the species identified. It is not the ibex of the Himalayas, *Capra sibirica*, the horns being very different. It is, however, similar to a living specimen which I procured in the Sulimani range of mountains on the north-west frontier of India. The wild sheep (*Ovis cycloceros*) is very plentiful, and the Ahu antelope is also found. Homin would be a paradise for a sportsman. It is a cool place even in summer, having an elevation of 6000 feet. It is curious that the other large goat—the markhor (*Capra megaceros*) which is common in the Sulimani Mountains of Afghanistan, is not found here.

I marched from Homin on the 15th of October. The road leads up a great ravine for many miles. I possessed only the three horses we rode, and carried the few things I required in a large pair of saddle bags on my servant's horse. One of my animals got a bad sore back, which delayed me very much. I could not purchase a horse to replace him, and was obliged to hire two donkeys, and though Persian donkeys are wonderful beasts, carrying heavy loads, they delayed me a good deal. I travelled without a guide, and the only water being a short distance off the road in a side ravine, I missed it in the night. As soon as I found I must have passed the water, I went a few hundred yards off the road, and went to sleep in the stony bed of the ravine, after picketing the horses and giving them some food I always carried for them. At dawn, I went back, and found the water, and also the donkeys, who with their driver had lost their way in the night, and only reached the water at the same time that we did.

The road from Yazd to Tabbas joins the road from Ardakan to that place in the ravine just mentioned, a few miles before reaching Doh Kulli, as this small spring of water is called. After watering our horses at the spring, we went on across the same barren country. At 29 miles from Homin we reached a caravanserai in the desert named Rizab, where there was a very small spring of brackish water. Near this place was a deserted village, which had been destroyed many years before by Biluchi marauders from Seistan. This is the furthest point to which I have heard of Biluchi raids extending, and considering the great distance from Seistan it is wonderful that their raids should extend so far.

The following day we marched 13 miles to the village of Sukand, or Sagand, as it is more usually called. This place is said to derive its name, which means sweet water, from the fact that the water is here really sweet, which is very rare in this part of the country, the water in most places being brackish. Sukand is a poor village, situated in a fort, but has a fine brick caravanserai. The people live by grazing flocks of fat-tailed sheep on the sparse vegetation of the less barren parts of the desert.

The fat-tailed sheep is eminently fitted for living in a desert land.

Firstly, it does not require grass, and can live and thrive on sage-bush, and tamarisk scrub, and the few aromatic shrubs which grow here and there in patches in the more fertile spots on the edge of the desert. During the spring and early summer the tail gets very fat; the substance contained in it being something between marrow and fat. During the winter, when snow often covers the ground and there is hardly any grazing, these sheep pick up a very precarious living, the shrubs that they usually subsist on having dried up and partially withered away, but they are able to support themselves on wonderfully little food, the fat of the tail being absorbed into the system and acting as food. The same is also the case with camels; when well fed their humps get enormously fat, and the layers of fat in this part of their bodies act as a reserve of food, being absorbed in their desert journeys. I once examined a really fat camel's hump in a camel-butcher's shop in Baghdad, and the layers of fat were most singular in appearance.

I found the small population of Sukand much excited at the news of the arrival of a large party of raiding Biluchis, who were said to be stopping and plundering caravans between this place and Tabbas. I could get no guide to accompany me, and could hire no donkeys. At last, after great difficulty and on my pointing out that as yet the news was that the Biluchis were on the other side of Pusht-i-Badan, I got a man to go with me as far as the next village, 38 miles off.

I started in the afternoon: the barrenness of the land got worse and worse, the whole country between Sukand and Tabbas can only be described as a terrible desert. At the end of 14 miles there is a fine caravanserai and a ruined village called Illahabad, which had been plundered and burnt by Biluchis twenty-five years ago. Near the village there is a little tamarisk scrub, and the eye is delighted with the sight of the green. There is a well of water at Illahabad, but it is very deep and the water very brackish when obtained, so it is never used by travellers. Sometimes camels and sheep are brought here to graze, but at present they have all been driven away to places where there are forts, for fear of the Biluchis.

Soon after passing Illahabad a small piece of *kavir* or salt desert is passed. Although the whole country I am travelling over is known as kavir, that is a misnomer. It is certainly a desert, and some portion is probably surpassed in desolation by no desert tract in the world, but only portions of it are true kavir or salt desert. This occurs in patches. Some of these, however, are very large, extending to more than 100 miles in length, and 25 to 30 miles in width. The larger tracts of kavir are all to the northward. In the southern part of the desert the rainfall is so small that the patches of kavir are much less in extent. The kavir I am now crossing, though not of great extent, may be taken as a type of a salt desert. I will describe one, and point out what I think is the cause of this curious formation.

I believe the whole of the country I am now travelling over was once the bed of a shallow sea. It has every appearance of having been the bed of such a sea. Persians have traditions that it was so, and though of course these traditions are mixed up with incredible fables, still they point to a probable fact. One account says Iran was formerly covered with water, and that King Solomon, by the aid of two Deevs, or demons, named Ard and Bil, drained off the waters into the Caspian Sea, and that the town of Ardabil in Northern Persia takes its name from these demons who helped King Solomon. Another tradition refers to the kavir alone, which it says was drained on the day Mahomad was born, by a miracle. The mountains bear all the characteristics of strata formed in the bed of a shallow sea or lake. The red colour caused by oxide of iron, and which I mentioned before, is, I believe, a sign of strata so formed.

When the uprising occurred which drained the sea, this desert still remained considerably below the level of the neighbouring Persian highlands, and the rivers continued to drain into it and formed marshes. The waters of all springs and rivers contain salts in minute quantities, but the rivers of Persia are often so salt as to be undrinkable. The salts brought down by the rivers are deposited in the marsh, which thus gets salter year by year. It dries up during the fierce summer heats, to become a marsh again when the winter floods occur. This process is repeated for ages, and in the course of time the whole soil over which the marsh extends becomes encrusted with salt.

When springs are present on a portion of kavir I have seen the salt extracted in the following manner. The water is made to pass over a considerable piece of kavir until it becomes very strongly impregnated with salt; it is then run down into a shallow basin and allowed to evaporate, leaving a cake of salt nearly a foot thick. In some places cakes of this thickness are lying on the surface without any aid from man, but this is rare. When a comparatively large river forms the marsh the extent of country affected is great, the area of salt marsh depending upon the volume of water brought down.

There are various sorts of kavir, depending upon the soil and the amount of salt. One sort is in ridges, looking as if the ground had been ploughed up, then left fallow for some time, and a glazy coating of salt clay afterwards poured all over it. When this glazy coating is trodden upon it gives way, and the horses' hoof sinks into a powdery sort of soil containing much salt. If this sort of kavir is ridden over, a continued crackling sound is heard, caused by the horses' feet breaking through the glazy surface. At other times the whole surface seems rotten, and the horses' feet sink deeply into it, causing salt to show white on the surface. Sometimes a damp spot is come upon, looking as if it had sweated up from below.

When a tract of salt desert is crossed on a bright moonlight night

it has a strange appearance. Persians, who are very superstitious, declare that djins and demons live in these salt deserts, and tell innumerable stories of their appearing to human beings, and of the scurvy tricks they play them. Such a place is well fitted for ghost stories. A strange weird feeling is apt to steal over one, and to beget thoughts of some fabled dragon of old, the crackling soil representing his wrinkled skin, and the damp places seeming to be wetted by his loathsome sweat. Persians firmly believe in demons. A man whom I once sent with a letter to order post-horses did not arrive at the town to which he was commissioned to go, but returned to the place from which he was despatched. On being interrogated as to his return, he declared he had seen two demons on the road, who barred his way and only disappeared at daylight, when they vanished in the form of wreaths of smoke. A friend of mine suggested that the vision may have been due to spirits of another sort.

After a long desert march of 38 miles without water we reached the miserable village of Pusht-i-Badan. The houses were nearly all in ruins, and the whole place had a most desolate look which was very depressing. Our horses had heavy saddle-bags to carry besides ourselves, and the pony I was riding fell from sheer fatigue, just before reaching the village, though I had rested several hours, and fed him twice on the journey.

At Pusht-i-Badan there are two springs of water, one brackish and the other fresh. From these springs, about a square mile of ground is watered and cultivated, but the place does not supply food enough for its inhabitants and the pilgrims who pass through it on their way to Mash-had. I here found the alarm about the Biluchi band, who were plundering, even greater than at Sukand. I was not aware that Biluchis were so much dreaded by the Persians as they appear to be, though I knew that a Turkoman would scare a multitude of Persians from the southern provinces of the kingdom. After much difficulty I persuaded a man to accompany me as guide to the next stage.

We left Pusht-i-Badan in the afternoon, and after $4\frac{1}{2}$ miles of the usual bare plain, reached a poor little hamlet called Shorab, or salt water, where there is a spring of brackish water and a little tamarisk scrub. It is very curious that this spring contained many fish; all these small springs in Persia do contain fish, which take refuge in the karez or underground channels that convey the water from its source to the surface. Many of the fish which inhabit these channels are blind, living as they do in the dark channels which often run for 30 or 40 miles before they are brought to the surface; from disuse of their eyes they lose their sight.

After passing Shorab, the same desert country is passed over until a low ridge of hills is reached, where there is a fine reservoir for water protected by a tower called Haoz-i-Shah Abbas, but at this season the

tank is dry. It is 18 miles from Pusht-i-Badan. This low ridge is the dividing line between Khorasan, the ancient Parthia, and Yazd. After passing Haoz-i-Shah Abbas the desert becomes worse than ever; heretofore it has consisted of solid earth, but here we reach sand-dunes, and the road leads up one and down another, the one so like the other that it is difficult to keep on the right track. It was a lovely moonlight night, and I and my partner pressed on, leaving the guide and donkeys behind. Our progress was very slow indeed, as the horses sank at every step to their fetlocks, and sometimes to their knees in the loose sand. We were afraid of loosing the road. At last, after six miles of sand, we got to a low ridge of hills, which was a great relief to our tired horses, as they had firm ground to walk over. At the end of this ridge, where the road descends again to the plain, there was a small spring of sweet water known as Chasma Shutaran or the camels' spring. Here there was a deserted tower. I had been specially warned against resting here, as it is the haunt of Biluchis when raiding.

I filled my large leathern water-bottle, which held about a gallon; watered the horses, and went on. As it was still some miles to Robat-i-Khan, and my horses were very tired, although I had already rested them once, I proceeded about half a mile, then turned off the road and found a splendid hiding-place in a ravine, where we could see without being seen. Here I rested for about two hours, until the man with the donkeys came up. He was in a great state of fear, declaring the Biluchis were about. After the animals had rested, we went on through a rather sandy tract of country to Robat-i-Khan, distant 39 miles from our starting-point. Robat-i-Khan is a small village, strongly fortified with a high tower outside it, and a large caravanserai. There is a spring of brackish water which fills a tank. Some little distance off there is a fine *haoz* or reservoir containing sweet water.

A great many pilgrims were collected in the caravanserai at this place in consequence of the petty official of the Khan of Tabbas, who was stationed here with a few mounted men to guard the frontier of Khorasan, declaring that he had orders to prevent any one going on, as a band of marauding Biluchis had possession of the road a few miles from Robat-i-Khan. I could get no guide and no donkeys to carry the saddle-bags of my horse, which was laid up with a sore back. I had to wait three days here, the people of the place being in great terror, as they declared, of an attack by Biluchis.

I here for the first time saw two men, who with their wives had been carried off and plundered by Biluchis. They said that they and their wives, with two other men, were on the road from Kirman to Tabbas, and when 80 miles to the southward of this place they were pounced upon by a band of thirty-seven men, most of them mounted on the swift Seistan camels so celebrated for their speed. They and their wives were stripped of everything but the most necessary clothing, and were carried

about on camels for three days. One of their party who knew the country gave offence to the Biluchis by refusing to act as guide, and was hacked to pieces with swords, another of their party was killed by the Biluchis, and they heard that a traveller had been murdered previous to their own capture. At the end of three days the two men whom I met with their wives were released near Chasma Shutaran, the lonely spring in the desert where I filled my water-bottle. They came on to Robat-i-Khan, and were anxious to proceed on their journey.

I here heard of the mode of procedure of these Biluchi marauders. The camels they ride travel very fast. They can go 70 or even 80 miles a day, carrying one or sometimes two men and a little food. The longest distance that I have ever myself known a good trained camel to cover in a day was 92 measured miles on a road. This was accomplished between early dawn and evening, but the camel performing this feat would not have been able to go on the next day for any great distance. This was, however, not a Biluchi camel. The Biluchis, with their trained camels which only require water every other day, and who can on a push last for three days without water, scour the country for incredible distances, lying hidden in some ravine in the desert, and pouncing upon unwary travellers, and driving off camels and cattle wherever found. Sometimes a rich caravan falls into their hands. Their camels can find enough grazing, in the less arid spots of the desert, to support life, assisted by a little food supplied by their owners in the form of balls of barley-meal mixed with just enough water to make a paste. A camel can exist in this way for a few weeks only while the foray lasts. The Biluchis only approach some lonely spring in the desert every other day, water their camels, fill their water-skins, and go back to hide in some new spot.

On the second day of my stay here, a man came running in, declaring that as he was gathering assafœtida on the hills above Chasma Shutaran he saw a large body of Biluchis, whom he estimated at sixty, come to the spring, fill their water-skins and go off; and that he had left his assafœtida lying on the ground to run in and give notice.

Assafœtida is produced in great quantities on the edge of this desert. It is a stinking gum which exudes from a desert plant when it is cut. The season for collecting it lasts about eight months, from spring until autumn. A plant can be cut fourteen times in one year, and the gum which exudes from the wound is carefully collected. The Persians know no use for assafœtida, and asked me what was done with it in India. I said it was used in medicine, and that a very small quantity was employed as a flavouring to certain kinds of food by the natives in India. I was then asked if I had ever tasted food so prepared, and on my answering yes, and that I thought it rather nice, I was looked upon with horror by the bystanders.

After three days' delay I found a camel man named Aly Kuli Khan,

of Nain, who declared his determination of proceeding. He was taking a caravan of laden camels from Yazd to Birjand, and he said he would lend me a spare camel for my load. We marched off very secretly, not letting the people of the village know by what road we were going. All the camels' bells were removed and every precaution taken to prevent noise. The padded feet of the camels made no sound. We left the road and travelled all night across country over some very rough ground, crossing a difficult pass for laden camels. We started as soon as it was dark, about half-past six, and did not get in until half-past eight next morning, having taken 14 hours to do 30 miles; but we had got past the Biluchis, or the place where they were supposed to be. The next day we went on to Chardeh, a group of four villages, in the Tabbas district.

The real desert is supposed to terminate at Tabbas, and the immediate neighbourhood of that place is fairly fertile in consequence of a good supply of water. In any other country I should have called Chardeh a very poor place, but there was good water to drink, which after all the nasty stuff I had swallowed, containing various sorts of salts, was a pleasant change. Date palms, which are the commonest trees at Chardeh and Tabbas, are not beautiful, but after seeing no trees at all they are quite refreshing. Much tobacco of a good quality is grown at Tabbas, and exported, besides a small quantity of silk and a great deal of assafœtida. Camels and sheep are numerous in the country northward of Tabbas, towards Mash-had, but nothing at all is produced in the desert country I had travelled over except assafœtida. The group of four villages known as Chardeh, are Jowcar, Tugianun, Tuskinun, and Madiabad, containing altogether about 800 inhabitants.

On the 29th October I rode into Tabbas, which is 10 miles from Chardeh, over a sandy plain. This place, I believe, had not been visited by any Englishmen before my arrival, except by Colonel Macgregor some six years previously, though it has been visited by several Russians, especially those of Khanikoff's mission.

Sir John Malcolm has thrown a sort of halo over Tabbas by his description of it and its ruler in his history of Persia, but it is really a very ordinary town. A portion of it is fortified with a deep ditch and walls, stronger and in better repair than is usual in Persia. The gates are also thickly plated with iron, and though of course not a strong place, it is in better order than most Persian towns, where, if the gate is strong enough to resist being kicked in by a Turkoman's horse, it is considered sufficient. The fortified portion contains about 5000 inhabitants, but the mass of the people live outside. There is a wide street outside the town which has rather a fine appearance. The mass of the population live beyond the walls. The country of Tabbas is ruled by an hereditary governor, who is nevertheless appointed by the Shah, but always from the same family. The present incumbent is named

Mahomad Bakhir Khan, and has the title of Imad-ul-Mulk, or Pillar of the State. He is notorious for his stupidity, and many amusing stories are told of him, such as that when he was once trying a horse he called for a looking-glass to see how it looked when galloping, and so forth.

In the town is a very fine minaret, the largest and highest I have ever seen, but it is fast going to ruin. I purchased a mule here to replace my horse that was laid up. I suppose the bigotry of the Mahommedans of Tabbas cannot be equalled except at Riad, the Wahabi capital of Central Arabia. The people see no one, and there is not even the amount of civilisation which would come with a governor appointed from the capital with his following of people, who had seen something of European civilisation.

I had entered the town rather afraid of being discovered to be a European, as I had not yet got quite accustomed to my assumed character as an Armenian, and feared the superior astuteness of townsmen. But I need have given myself no uneasiness on this score. I had only just arrived at the caravanserai when the keeper of it came and said we could not stay there, as it was the khan's or governor's orders that Christians should not be allowed to halt there. If they had known I was an Englishman no doubt they would have received me civilly, but to Armenians or any sort of Christians that they dared to treat in this way they would not give even a lodging. I did not mind this in the least; I had seen all I wanted of Tabbas, and rode back to Chardeh well pleased to find that my disguise was not detected: after this I felt quite at home even in a town.

The next day I marched towards Sultanabad, the capital of the Turshiz district. Near Tabbas there are three ranges of mountains;—the Shutari range, the highest peaks of which rise to a height of probably 10,000 feet; the Nastandji, some 2000 feet lower, and the Shorab range lower still. The first march is to Shirghist, about 18 miles. The road passes over a barren, sandy plain, between the Shutari and Nastandji ranges, until near the village, when it runs through an opening of the Shutari.

Shirghist is a very small village with a spring of good water. At the point where the road passes through an outlying spur of the Shutari range, another road branches off to Deh Mahomad and Bajistan. The road from Shirghist runs about 30° east of north, skirting the Shutari Hills for some six miles; then a spur is thrown out from the range which is virtually a continuation of the Shutari, but which is not known by that name. In fact it has no name, but as is usual in Persia, each part of the range has a different name, usually that of the neighbouring village.

Travelling 13 miles a group of small villages is reached, the nearest to the road being Pushna Darun. On the following day I marched over a rather barren country, but far from being desert. About four miles

to the left of the road the town of Dasjirdun was seen. From Dasjirdun, which is, I hear, a thriving place, there are roads directly across the desert to both Shahrud and Damghan. This is the desert road from Tabbas to Teheran, and almost all the tobacco which is exported to Teheran is sent on camels by it. My informant, who had travelled by the road, said that it was 12 marches for camels from Tabbas to Damghan. Two of these marches were from Tabbas to Dasjirdun, then follow eight marches of from 20 to 24 miles each, with water at each stage, to a small village called Tahrud, and finally two marches to Damghan. He said horsemen never travelled this road as they could not procure food for their horses. He also said that though much kavir was skirted none was crossed by this road. But by the road from Khūr to Samnan or Damghan, he heard there was much kavir, though he had not travelled along it. I passed a flourishing village called Deh Noband at 14 miles distance, and stopped at a wretched little hamlet named Abid, with brackish water, a few miles further on.

On the 3rd of November I marched to Zangi Chah, a miserable village which produces nothing but assafœtida, but has a good caravanserai. Here I saw the largest tract of kavir I have yet seen. It extends, I am told, for more than 100 miles in length, and is some 25 to 30 miles in breadth near here. Fortunately the road does not cross it. A few days previous to my arrival the Biluchis had made a most successful attack on a caravan of 200 laden camels at a place 20 miles from here, and carried off goods to a large amount. The value was stated to be 4400*l*., but that doubtless was an exaggeration. Of the fact of the attack and plunder of this caravan there could be no doubt, as I met, a few days later, great numbers of the poor people who had been plundered of everything and stripped of all but the barest necessary clothing.

The alarm about these Biluchis is great all over this part of the country, and it is very disgraceful and quite unusual that they should be allowed to plunder so far in the interior of Persia as this place. I heard that the 200 stolen camels and the less valuable portion of the goods were recaptured by the Amir of Kaian. None of the people with the caravan were killed. Biluchis very seldom kill; Turkomans almost always kill those they cannot carry off.

I marched the next day to Abdullabad in the Turshiz district, a distance of 34 miles. It was a great pleasure to get into a fertile part of the country again, after all the dreadful desert I had been passing over, and to see green fields and people ploughing. Near Abdullabad is the site of a city called Firozabad. Some minarets which have been covered with various coloured faience are all that remains of the city. The walls and gates can be traced in some places. It was destroyed by the Amir Timour. My next march was through a fertile country to a very flourishing village called Khalilabad, 22 miles distant from Abdullabad. Two small canals from the Shisdraz river were crossed at the village of

Kundur. This river was said to be situated about four miles away, and called Shisdraz because after emerging from the mountains it was divided into six small channels or canals, two of which pass Kundur. Khalilabad produces much silk of a good quality. The mountains to the northward of the Turshiz plain are known as Bejwird Kuh and Siah Kuh, those to the southward as Begou Kuh.

On the 9th of November I reached Sultanabad, the chief town of the Turshiz district. All maps mark a town called Turshiz, but there is no such town, it is only the name of the district. Sultanabad is a small but flourishing town of some 5000 inhabitants, with a good deal of trade, silk and wheat being the chief articles exported. The next day I marched only five miles, to Furk, a village on the edge of the Turshiz district, and the day following 23 miles to Kushdurreh, a very fertile village in the Turbat Hidari district. I crossed the only running stream of water of any size which I had passed since leaving Ispahan. It is situated 18 miles from Furk, and about four miles from the small town of Askand, and is called Askand Rud. The water in the stream even at this dry season is about 50 feet wide. It runs with a rapid current in a course nearly due north and south at the point where the road crosses it. Judging by the width of its bed and the depth to which it was eroded, I should think that in spring it must bring down a large volume of water. It is said to rise in the Derby Mountains, near the Surkh Kuh range, but not from them. It passes through the Siah Kuh range and forms, I am told, a waterfall. It is used up in irrigation near Faizabad, a place to the southward. No doubt the water of this stream, with perhaps some help from the Shisdraz stream, is the cause of the great kavir which I saw near Zangi Chah, and which extends towards Faizabad.

I marched to Turbat Hidari, distant 18 miles, on the 13th of November. At Turbat Hidari I got into a comparatively beaten track which has been described by several travellers, so I will not describe the road thence to Mash-had. I marched it in four days and halted a few days near the town. I did not enter Mash-had, but rode past it and got on to the Kuchan or Kabuchan road. This road runs in a valley between two ranges of mountains; those on the left hand are the most lofty, and are called Binalud. The range of mountains on the opposite side of the valley is not nearly so lofty, though one peak, Hazar Masjid, or the thousand mosques, which gives its name to the range, is nearly as high as any peak in the Binalud range.

The first day after passing Mash-had I halted at a village called Kazimabad, 10 miles distant, and the next at Shangullah. The plain over which I am now passing is very fertile indeed, and this part of Khorasan may be looked upon as the granary of Persia. The villages in this neighbourhood are strongly fortified, and the forts are all kept in good repair and not allowed to fall into ruin like so many forts in

more peaceful parts of Persia. I here heard of a Turkoman foray having taken place to the south of Mash-had in the district known as Barkharz, 3000 sheep and some 30 of the inhabitants having been carried off, and a captured Turkoman blown from a gun. On the 22nd November, I marched to a small town of about 4000 inhabitants, called Radkan, distant 27 miles. Before reaching this town a marsh is passed which is one of the sources of the Kashaf Rud. This river, after watering the Mash-had country, falls into the Hari Rud. On the edge of the marsh, and about one mile from Radkan, a very curious tower is seen, standing on rather high ground, and probably intended as a hunting tower. It is very lofty, and probably very ancient; constructed of small red bricks; the outside being composed of fluted brick columns, beautifully built. It formerly consisted of three storeys, the flooring of which has fallen in, and had a platform at the top evidently for a look-out. There are no loopholes or openings of any sort except two doors at the bottom. The roof had been of blue encaustic tiles, and an inscription in enormous Cufic letters had run round the building, but though the form of letters could be traced just enough to show in what characters they had been, nothing could be made out of them.

Radkan has a deputy-governor of its own, and is a poor, miserable town. A splendid breed of camels is met with in the district. The Khorasan camel is celebrated for its size and strength. It has very long hair, and bears cold and exposure far better than the ordinary Arabian or Persian camel. The best animals are a cross between the Bactrian or two-humped and the Arabian or one-humped camel. The first cross is by far the best. The load of an ordinary Persian camel is generally 320 lbs., of an Indian camel 400 lbs., but one of the Khorasan breed will carry 600 and even 700 lbs.

In India a wonderful ignorance prevails about camels, and they die by thousands in every campaign. Our natural history books teach us that camels can go without water for long periods, and that they can live on the scanty thorn bushes of the desert. This is far from being the case; camels should be watered at least once a day if possible, and they cannot go more than three days without water, except when trained to do so, and then they suffer much, and many die. A camel which is in good condition, and has a fat hump, will manage with wonderfully little food for a fortnight or three weeks, but if the system of little food is continued much beyond the latter period he simply gets ill and dies. A camel requires nearly as much food as a small horse, though the food may be of coarser quality. He prefers thorny bushes, twigs and leaves, but when these are not procurable he must have at least 5 lbs. of grain and about 17 lbs. of chaff daily, or he very soon dies. Deserts are crossed by camels, but the line of camels' bones along the road attest at what cost to the animals.

From Radkan I marched to Dautli, distance 22 miles; the road

skirted the hills, just keeping in the plain. The men of Dautli were Turks, they said, brought from Azerbijan and settled here. I never saw finer specimens of humanity. After this country was almost depopulated by Jenghiz Khan in the 13th century, it remained very sparsely inhabited until Kurds and Turks from the western provinces of Persia were settled here by Shah Ismail and Shah Abbas the Great of the Sufevian dynasty, in the 15th and 16th centuries, to act as a barrier against the Turkomans, who then as now were the curse of the country.

I here left the Kuchan road, which is 13 miles from Dautli, and turned off towards Daragez. At a distance of eight miles the village of Badkhor is reached. A stream, forming the head waters of the river Atrak, passes Badkhor and runs to Kuchan. The road follows its bank for about two and a half miles, when the village of Towarik is reached; here the road turns away from the stream. I did not follow it up to its source, but it is said to rise in the Hazar Masjid range of mountains, not many miles beyond Towarik, and is acknowledged to be the source of the Atrak. Soon after leaving Towarik the ascent of the Maidan Kuni Pass is commenced. The plateau at the top of the pass is known as Maidan Kuni or the Bloody Plateau, from the number of people who perish here during the winter when trying to cross over during the heavy snow. This is the easiest road into the district of Daragez, which is situated across this mountain range; but for weeks in the winter, when there is snow, there is no communication between Daragez and the rest of Khorasan. The other road by Kalat-i-Nadiri is, I am told, worse than this one, and blocked earlier in the winter by snow.

This plateau is the watershed, the rivers which take their rise on its western side flowing to the Caspian Sea, while those which have their sources on its eastern face are lost in the desert, not even reaching the Tejend. From Maidan Kuni a very good view is obtained of the Hazar Masjid Peak, which rises in vast grandeur to a height of 10,500 feet. The Mahommedans say that there are a thousand mosques, one for each prophet who has come into the world. Hence the name Hazar Masjid, or thousand mosques. As soon as the Maidan Kuni Plateau is passed there is a sharp descent, and then there are three small villages of the name of Derbendi, the commencement of the Daragez district; the Maidan Kuni Pass separating it from the Kuchan district. From Derbendi I continued to Mahomadabad, the capital of the Daragez district, crossing the Allaho Akbar Pass *en route*. The Allaho Akbar is lower than the Maidan Kuni Pass, being only 4200 feet high, and it can almost always be crossed without difficulty even in winter. The road is bad to the crest of the pass, after that there is a good hill road. There is a fine view from the Allaho Akbar Pass. Several low ranges of hills cross the Daragez plain, but no mountain ranges, while beyond, the Turkoman plain is seen extending away to the blue horizon. In every

direction villages and cultivation are seen, showing it to be a fertile land; and every one says, "If we had only peace we should indeed be rich." But in every direction the plain is dotted with towers, as refuges from the dreaded Turkoman.

After descending to the plain the flourishing village of Chapashli is passed. Chapashli is surrounded by vineyards, which are famed all over the country. Grapes are so plentiful that 45 lbs. of the finest can be purchased for ninepence; but there is a reverse to this picture: only eight years ago it was suddenly attacked by a large body of Turkomans, who killed or carried off into slavery more than 300 of the population.

Near the village of Hakwerdi, a little further on, the refuge towers are very close together, every square of 150 yards of the fields having one. In other parts of Khorasan I had seen a few of these towers, but here the whole country is so thickly dotted with them as to look like a chess-board covered with chessmen. The towers are small, round buildings, built of unbaked clay, about 12 feet high. They are roofed over, and have no opening whatever except a small round hole at the bottom, through which a not too stout person may wriggle himself in like a snake. If surprised by Turkomans, the cultivator or traveller creeps through this hole, and closes it with two large stones, which are there for the purpose. Even if these stones are wanting, the occupant is safe, as it would indeed be a daring Turkoman who would try and force himself through the hole, with the certainty of having his brains beaten out with a stone while struggling to get through, even supposing the person inside had no better weapon, but almost every one here goes armed. The defence towers are higher and larger, and have a parapet at the top, with loopholes to fire through, and a ladder for ascending to the top. Each vineyard or orchard has its one or more towers.

I stayed a considerable time in Mahomadabad and other parts of the Daragez, viz. from the 25th of November, 1880, to the 15th of January, 1881. I rented a house, and was given a shop in the bazaar, which I accepted but never opened. Mahomadabad is a particularly good place at which to obtain information of the Turkomans, as the Daragez district lies between the Akhal Tekke and Merv Tekke Turkoman country, and the shortest road from one to the other leads through Lutfabad, a town 14 miles from Mahomadabad. In the bazaar there are always numbers of Akhal Tekkes buying and selling, Mahomadabad being the town where they purchase all they require. Askabad, one of their largest settlements, is only two marches off. From the Merv country many caravans come in, and I saw and spoke with many Merv Tekke. I used to wander about the bazaar, conversing with the people. Mahomadabad is a bilingual town, every one speaking both Persian and Turki.

II.

The Daragez district has a length of some 65 miles, and a breadth of about 40. There is a governor appointed by the Shah, though the appointment is hereditary in one family; he bears the title of Begler Begi, and the people speak of him familiarly as the Khan. His name is Mahomed Aly Khan. He is of Turk descent, as are a large portion of his subjects. There are also many Kurd villages, but it is a distinction to be a Turk.

Nadir Shah, the last king who ruled Persia in its full extent, from Georgia to Candahar and from the Tigris to the Oxus, was born in a tent of an Iliat, or tent-dwelling family, of the Afshar tribe, about one mile from Mahomadabad. He built a small fort (now in ruins) to mark the place of his birth. At present it is only the wild tribes who plunder Persia, Bokhara, and Afghanistan that are called Turkomans; but the name had once a much wider signification, and there is really no ethnic difference between the civilised Kajar tribe, to which the royal family of Persia belong, and those now called Turkomans. In the 'History of Nadir Shah' called Jehangosha, written by Mirza Mehdi Khan Astrabadi, he is always spoken of as a Turkoman of the tribe of Afshar. Nadir Shah himself, in a letter to his son, speaks of having treated the Emperor of Delhi with courtesy when he captured that city, because they were both of illustrious Turkoman descent.

We also know that the Turkomans of the white sheep and the Turkomans of the black sheep—so called from the figures of these animals that they carried on their standards, and who had their respective capitals, the one at Diarbekir in Kurdistan, and the other at Van in Armenia—were of the same race as the nomads of the Kara Kum desert. The Turkomans speak a variety of Turki differing very little from the Turki spoken all over Northern Persia, and the Turks of Persia understand it, though there are some differences. The Persians call the Turki spoken by the Turkomans, Jagatai.

The Turkomans inhabit the country between the Caspian Sea and the river Oxus. This country bears no general name, and a great part of it is taken up by the sands of the Kara Kum or Black Sand Desert. It is bounded on the north by the kingdom of Kharezm, or Khiva, and on the south by Persia and Afghanistan. There are a few Turkomans in Afghan territory, and a few also across the Oxus in Bokhara. The country inhabited by the Turkomans is watered by two considerable rivers besides the Amu or Oxus, which bounds it. One of these, the Murghab, takes its rise far away in the Safid Kuh or White Mountains, in Afghanistan, and, after a long course, loses itself in the sands of the Kara Kum Desert. Before doing so, however, it fertilises a long, narrow strip of country on its banks. This tract of country, from the point where the Murghab leaves Afghan territory to the point where it

is lost in the desert, has always been celebrated in Eastern history as a most fertile land.

Meru, or Merv, the city on the Murghab, is mentioned in the earliest records of the Aryan race. Balkh, Merv, and Seistan were the places where Iranian history begins. The country watered by the Murghab and Tejend rivers was known to the Greeks as Margiana, and it was visited by Alexander the Great, and Antiochus Nicator ruled on the Murghab. However, we need not dwell on these old world histories, which I have only alluded to, to show what Merv was long ago. It was the seat of a Christian archbishop of the Nestorian Church during the reigns of the Sassanian dynasty of Zoroastrian kings of Persia, as was also Toos near Mash-had in Khorasan. I was much interested in trying to discover remains of the numerous Christian churches in this country, which the presence of two archbishops would presuppose.

At a village called Julfan, some 12 miles distant from Mahomadabad, a mound was pointed out to me called Tepe Kalisa, or the church mound, where tradition says a Christian church had stood. I visited the place, and found some ruins, but nothing that could enable me to form a definite opinion as to whether it was a church or not. *Kalisa*, which is only a corruption of *ecclesia*, is never used by these people except for a Christian church. It was curious that the neighbouring village should have borne the name of Julfan, for Julfa on the Araxes, and Julfa the Armenian quarter of Ispahan, are both Christian towns. The people of this village of Julfan said the tradition was that it had been a Christian village, but that it had been destroyed by Jenghiz Khan in the thirteenth century, and that they themselves were Kurds brought from the west to repeople the deserted village. Also in a route kindly furnished to me from Mahomadabad to Mehna, near the Tejend, by Mr. O'Donovan, the *Daily News* correspondent, he mentions three villages as Khodja Kalisi, Akmanat Kalisi, and Kara Khan Kalisi. I cannot help thinking that all these places have taken their names from the ruins of Christian churches being situated near them. They are between Kahka and Mehna on the Persian border. It would be very interesting to search for the ruins, and find out if this was the case.

The Arabs captured Merv about A.D. 666, and found it a very rich city. Until this time it had a Christian archbishop. At the time of the Arab conquest the Salor and Saruk tribes of Turkomans were in the country. The lieutenants of the Khalifs of Baghdad ruled Khorasan with Merv as their capital. I have not space to enter into the history of Merv in the time of Sultan Sangar.

On the 25th of February, 1221, Merv was besieged by a Mogul army, under Tului, a son of Jenghiz Khan; the place was captured, and the population put to death with very few exceptions. It is said by Ibn-ul-Ether that 700,000 dead bodies were counted. This is probably an exaggeration, but it shows how large a city Merv must have been that

a writer could suggest that 700,000 people were put to death in it. The Moguls had a curious and methodical way of numbering the slain. When a thousand dead had been completed, they placed one body with its head buried in the ground and its feet upwards, so that the thousands might be conveniently counted.

The last Merv was the city so bravely held by Bairam Ali Khan Kajar. A branch of the Kajar family who now rule Persia had been placed in Merv by Shah Tamasp to defend this outlying province, as they were renowned for their courage. During the troubles that followed the death of Nadir Shah, Merv was attacked and captured from the Persians by Begge Jan, called also Amir Māsum, the Amir of Bokhara, in 1784. Bairam Ali Khan was slain outside the town, and his son Mahomad Hussain Khan, who made a glorious defence—even the women joining in it—was carried captive with the population that were spared, to Bokhara. Since that date there has properly been no such town as Merv. The Merv country still exists, but there is nothing worthy the name of town there. The Amir of Bokhara broke down the great dam on the Murghab which filled the numerous canals and fertilised the whole country, in the hope of rendering it a desert inaccessible to Persia. After 1784 it belonged to Bokhara for some years, and the Salor and Saruk Turkomans encamped on it. It was subsequently taken from the Amir of Bokhara by the Khan of Khiva, whose officials were found here living in a poor village called Merv when the place was visited by Abbott early in 1840. This place, which was a possession of the Saruk tribe, and which is described by Abbott as consisting of about 100 mud huts, has been destroyed by the Tekke Turkomans, who began to settle in this country about 1830, and finally drove the Saruks further up the Murghab to Yulutan and Panj Deh. I have not been able to discover the date of the destruction of this last and most wretched of the places which have borne the name of Merv, but it was probably about 1855. This deserted place was occupied by Persian armies in 1857, under Sultan Murad Mirza Hissam-i-Sultunut, and again in 1860 by Hamza Mirza Hashmat-ud-Dowlah, whose army was disastrously defeated in an attack on Kala Kaushid Khan, then only just commenced and in a very rudimentary state. The Tekke Turkomans have possessed themselves of the best part of the country. They have built a large fort on the eastern bank of the most westerly branch of the Murghab. It is situated 25 miles below the great *band* or dam which divides the Murghab into many canals or branches. The place where the great band is situated is known as Benti. Here is also Allahsha, where there is a ferry over the Murghab, which is used for a few weeks in the spring when the river is in high flood, at other times there are wooden bridges.

The fort of Kaushid Khan, which is very strong indeed, is protected by the Murghab river on two sides, being built in a loop of the river.

It is about $2\frac{1}{2}$ miles long and $1\frac{1}{4}$ wide. The Tekke have most wonderful confidence in the strength of this place, which will contain, they say, 50,000 alajaks or Turkoman tents. It is called Kala Kaushid Khan, from the name of its founder, Kaushid Khan, the chief of the Beg clan of the Tekke tribe. It was commenced in 1860, and the Tekke have worked at it by fits and starts ever since.

When the Persians now speak of Mour or Merv they mean Kala Kaushid Khan. Turkomans themselves never speak of Mour as a town; when they use the term at all they mean the district where Merv was formerly situated. The fact of the Persians speaking of Merv as a town, and as a place captured by their armies, has led to endless confusion. There is no sign of a town about Kala Kaushid Khan. There are about 6000 tents of the Beg tribe generally pitched near it, and each chief man has a guest-house of mud or sun-burnt brick, but they themselves live either in felt tents, or in places where reeds are plentiful, in reed or mat-huts, which can be carried away on camels. Near Kala Kaushid Khan there is a boys' school, with five or six houses for the mollahs or priests who teach in it, belonging to Mollah Turah, the chief mollah of the Beg tribe. A market is held on the river bank, near the fort, and here the Jew traders who frequent the place, each trader being under the protection of some powerful Turkoman, have built small open enclosures without any roofs, where they expose their goods for sale on the two days in a week when a market is held.

When Persians speak of the bazaar of Merv they mean this open market place. Inside the fort some alajaks are pitched, and the family of Kaushid Khan have a guest-house there. The fort, however, is kept more as a place of refuge than as an ordinary habitation. From what I could gather, the portion of country fit for cultivation is about 90 miles long and extends to about eleven miles on each side of the river. The ground is very fertile and produces melons and water melons in plenty, and of great excellence. Melons constitute one of the exports to Daragez, both fresh and dried. Even in Mash-had the melons of Merv are much liked, and are sent by rich people as presents to one another.

General Abbott, who visited the country in 1840, says, "The profusion of water renders the soil productive, but it has not strength to bear any but the poorer sorts of grain." In a previous paragraph he says, "During the misrule and anarchy of the past sixty years the ancient dam of the Murghab was neglected and carried away. The dam is again set up and the lands are brought under culture." I gather from this that the dam had not long been repaired when Abbott saw it. Every one knows that in Eastern lands the sandy desert is soon rendered fertile by the silt brought down by the rivers when it is irrigated, and relapses into desert when unirrigated. For the first few years after cultivation these desert tracts are poor, but they soon improve. Vambery makes this remark of some lands on the other side

of the Oxus, but it equally applies in the present case. I can only suppose that the land has again been rendered fertile by the silt brought down by the Murghab, for all Turkomans and Persians who have visited it agree in saying that the Merv country is now a most fertile land. We have an instance, familiar to many of us, of desert being fertilised, in the inundations of the Nile. In Egypt, where the irrigating canals do not reach there is desert; so it is in the Merv country.

I will now leave the Murghab river and describe the Hari Rud or Tejend. The Tejend river has a longer course than the Murghab, and rises far away in Afghanistan, in fact, I believe that some of its head waters are situated in the western slopes of the Koh-i-Baba, near Kabul, but of this I speak with some doubt. The river passes near and waters the Herat plain. After passing the Afghan fortress of Ghurian it turns northward, and from Toman Agha to Sarakhs forms the boundary between Persia and Afghanistan. As a matter of fact, very little is known of the river between Toman Agha and Pul-i-Khatun, as this portion of the country is so infested by Turkoman bands that it is very seldom visited by any one else. From a few miles beyond Sarakhs both banks of the Tejend are Turkoman.

Many small streams from the mountain ranges of Daragez and Kalat-i-Nadiri run towards the Tejend, but none of them reach that river. I believe that in former times they did fall into it, but that now they are diverted for irrigation and are lost in the desert before reaching the Tejend. The Tejend is described by a friend of mine, who crossed it near Mehna, as being ordinarily fordable at all points below Sarakhs. In the spring, from the melting of the snows in the mountains, it is for a short period unfordable. He says that when he crossed it last February the water reached to his horse's stomach. The river bed was sunk about 12 or 15 feet below the level of the surrounding country. Immense quantities of driftwood covered its banks, and at each angle of the stream trees grew in abundance. There was little or no grass when he saw it in winter, but he said no doubt there would be plenty in the spring and summer. The Kashaf Rud, which passes near Mashhad, falls into the Tejend, and is one of its most considerable affluents.

The country bordering the Tejend has never played the same part in history as the Merv country. The only town of much importance on it in ancient times was Syrinx. In modern times Sarakhs, a town situated on the eastern bank of the river nearly opposite the present Persian fort of the same name, which is situated on the western bank, was a town of considerable importance. It was destroyed in 1830 by Abbas Mirza, the Persian Crown Prince, and many of the inhabitants killed; the remainder were carried away captive and settled by the Prince within the Persian border, but as they made themselves disagreeable to the Merv Tekke by giving notice of raids, they were all

carried away by them, whether with their own consent or not I was not able to ascertain, and distributed among the Tekke in the Merv country. The whole Salor tribe do not now number more than 5000 tents. The Tejend, like the Murghab, is finally lost in the sands of the Kara Kum Desert.

Formerly a great deal of the country now desert, between the Tejend and the Murghab rivers, was cultivated by means of canals from the Tejend, and these canals used to reach as far as Kucha Kum in the desert, rendering the journey much easier than it is at present.

I will now give an approximate estimate of the strength of the Turkoman tribes. This is pretty well known, as they are often mustered in war, and each tribe has a pretty accurate idea of its fighting strength, which may be considered as one fighting man for each tent.

Akhal Tekke in Daman-i-Kuh, now belonging to Russia	25,000 tents.
Merv Tekke on Murghab and a few on Tejend river	40,000 „
Salor (5000 tents) but included in Merv Tekke.	
Saruk at Yulutan and Panj Deh on Murghab river	11,000 „
Total	76,000 „

The number of inhabitants per tent may be taken as five. This will give for the Daman-i-Kuh and Merv country a population of 380,000, and I do not think this is an excessive estimate.

Besides the above, there are Eyrsari Turkomans on the left bank of the Oxus, who may be reckoned at 75,000 tents, or 375,000 persons.

These are all the Turkoman tribes of which I have any personal knowledge. I will, however, just mention the other chief tribes:—

Yomuts, near the Caspian Sea and Atrak rivers.
Chowdur, near Caspian Sea and Khiva.
Goklan, near Atrak river.
Kara, in desert beyond Murghab.
Alhehli, near Andkhoi, in Afghanistan, and also at Abiverd and Khaka in Persia.

Of these tribes I can give no estimate that would be worth having; I did not come in contact with them except with some of the Alhehli, many of whom have settled near Abiverd and Khaka within the Persian border; they are none of them powerful except the Yomuts.

I will now describe the country inhabited by the Akhal Tekke tribe: this is called Daman-i-Kuh, or skirt of the hills. It now forms a part of the new Trans-Caspian province of Russia. It is rather a bare strip of country, bordering the range of mountains which form the boundary of Khorasan on the north. Though it is not a rich country, it is far from being a desert; there are many small streams which run down into it from the mountains, and enable the plain to be cultivated. It extends from Kizil Arvat to Gawars. The small streams are soon lost in the desert, and beyond their influence there is no cultivation.

The new capital of the Trans-Caspian province of the Russians has been fixed at Bami, in the Akhal Tekke country, and a railway is being constructed from Mikhailovsk on the Caspian to Bami. The best proof that this country is not desert is, that it supported a population estimated at 25,000 tents or families, or 125,000 souls, and that these people were able to keep up a large number of horses of a very good breed; sheep are also kept in this tract in very large numbers. The fisheries of sturgeon and other fish for caviar on the Caspian coast of the new province are valuable. Petroleum is found, and when bored for, will no doubt be produced in as great quantities as at Baku on the opposite coast of the Caspian. The island of Cheleken, near Mikhailovsk, produces not only petroleum, but mineral wax in large quantities, which is a very important and valuable product.

In a rough way the Tekke Turkomans have a knowledge of the arts. They manufacture carpets that cannot be surpassed or equalled in Persia, and are similar to the ancient Persian carpets which fetch so large a price, and cannot now be made in Persia. They have powder mills worked by water-power which turn out very good gunpowder; and they are clever in manufacturing false Persian money, with which they flood the bazaar in Mahomadabad. Their felts, and the rough cloth they manufacture from sheeps' wool, are far superior to any made in Persia; and they also make a stuff that looks something like alpaca, only thicker, which fetches a high price. Aniline dyes, which are ruining the Persian carpets, have not yet reached the Turkomans, and as the materials they use are good, the carpets last almost for ever. In fact, everything the Turkomans make, except their money, is thoroughly good.

My stay in Daragez was rather eventful; on some five occasions I heard the call from the top of the mosque, "Turkomans! Turkomans! mount and away!" which is the call for the Governor's cavalry to mount and proceed in hot haste in pursuit of bands of these marauders who were carrying off slaves or cattle. No one in England has any conception of the fearful sufferings of this slave trade carried on by the Turkomans. I believe the number of slaves in Bokhara, Khiva, and the Turkoman country itself a few years since amounted to more than 100,000. Of course it is difficult to gather statistics on such a point, but 40,000 slaves are said, I do not know with what truth, to have been released by the Russians in Khiva alone. The value of slaves has fallen considerably since the Russians have closed the slave markets in Khiva and Bokhara. The Persian slaves in Bokhara have not been released, but the open sale of captives there has been prohibited, and though a few slaves, especially women, can still be secretly sold in Bokhara, Russia has struck a great blow at the Turkoman slave trade. The noble deed performed by that Power in releasing the numerous slaves in Khiva has added very much to her influence in this part of

Persia. In almost every village I met liberated slaves, who spoke of the kindness of the Russians in freeing them. Great numbers of the freed slaves were killed by the Turkomans on their return journey from Khiva.

Formerly the great slave-catching place was on the caravan road between Teheran and Mash-had near Miandasht. From this neighbourhood many slaves were carried off, often people of good family. An Indian princess was so captured, and I believe died in consequence of the ill-treatment she received. The sufferings of the poor slaves while being carried off is terrible, as they are lashed on a horse's back behind their captors, often wounded while being taken prisoners, and are allowed very little rest, night or day, until they reach the Turkoman tents. They are then heavily ironed, a ring being passed round the neck and one round each leg. From these rings there are chains fastening the legs together, and a long chain from the neck ring which is fastened to a tent-peg. I saw prisoners fastened in this Turkoman manner at Mahomadabad.

Women slaves are preferred. Imagine the feelings of a young woman of good family, torn from her friends and relations (probably after seeing her husband killed in defending her), and carried ruthlessly away. She who has never even shown her face, is stripped and offered for sale. Fortunate for her if she is not pretty, for then her friends may be able to ransom her. If beautiful, her captor will probably not part with her at any price. I am not painting a picture, but depicting scenes of almost daily occurrence.

The presence of the Russians across the Atrak has rendered the road from Teheran to Mash-had now safe, but slave-hunting is still carried on in Daragez and the country on the east of Khorasan. Though the closing of the slave trade in Bokhara and Khiva has lowered the price of slaves they are still valuable for work in the Turkoman country and for ransom by their friends.

The Turkomans almost always kill all they cannot carry away captive. If pressed in pursuit they cut off either the hands or feet, or both, of the captives and then leave them. I know of a well authenticated case of their doing this to a number of their captives.

At the end of December I heard that the Begler Begi, or Governor, was going on an expedition into his district in the direction of Askabad. I asked leave to accompany him, and he permitted me to do so. We started with an escort of about 50 cavalry and stopped the first night at a village called Nakundan, about nine miles from Daragez. Here I had long talks with more liberated slaves from Khiva. They said their treatment had been good when once they reached their owners' hands, but the journey was terrible. The next day I visited Julfan and Tepe Kalissa, or the church mound which I have before spoken of. I turned back from near a village called Tojanlu, about 15 miles from Mahomadabad, and went and met the Begler Begi at a shrine to the left of the

road, where he had been paying his devotions. He told me he had received news that 6000 Tekke Turkomans were on their way to Yangi Shahr, or Geok Tepe as it is called in Europe, and that he was most anxious, as he feared they would plunder some of his frontier villages *en route*. He said he must return that day to Mahomadabad, and that he had summoned every available mounted man in his district to meet the expected inroad. We returned to Mahomadabad, and the next day the Begler Begi, having collected some 400 cavalry, started for Lutfabad.

Lutfabad, sometimes also called Babagek, is a small town in the Atak country. The plain country is called Atak; it is well watered and very fertile, but dreadfully harried by the Turkomans. It forms a portion of Daragez, and the deputy governor is a brother of the Begler Begi named Syd Aly Khan.

I was hospitably entertained by Syd Aly Khan, as was also Mr. O'Donovan, the *Daily News* correspondent, who had also accompanied the Begler Begi. I had by this time made myself known to Mr. O'Donovan as an Englishman. For about three weeks, though I had seen him constantly, he believed me to be an Armenian, and always called me Khwaja Ibrahim, the name which I had adopted. One day he said to me, "Really, Khwaja Ibrahim, you speak English wonderfully well for an Armenian." I kept my countenance and said, "Oh, we Armenians of Calcutta receive a very fair education." It is certainly a great feat in newspaper enterprise to maintain a correspondent in so good a position to obtain news of what is happening in the Turkoman country. Mr. O'Donovan is at present a prisoner in the Merv country,* but he is in no danger, and will doubtless be in a position when he returns from his wonderful journey to give us valuable information. I did not much fear detection by a European, but I was really afraid of Mr. O'Donovan's servant. This man was a Persian, who made it a business to travel about with Englishmen new to the country, in which capacity he had served many, and he even spoke a little English. I had no cause, however, to fear this man's penetration, for one day he came to my servant and said, "How is it that your master knows the price of things in Persia so well; he has told my master and now I cannot make any profit out of him. I hear there is an English colonel coming from Ispahan to Mash-had, I shall go and serve him." The English colonel was myself. This man, who was afterwards in Captain Gill's service, told him he never suspected me.

Every one at Lutfabad held himself ready to turn out at a moment's notice in case one of the villages on the frontier close to Lutfabad should be attacked by the 6000 Turkomans. The Begler Begi declared he had 500 cavalry, although I thought myself he had not more than 400. But he was very anxious, and my private opinion was that if anything like 6000 Turkomans had appeared his cavalry would have

* While this is passing through the press, telegraphic news has been received of Mr. O'Donovan's release and return to Mash-had.

made a strategic movement—and a pretty rapid one too—to the rear. In view of such an eventuality I was mounted on the best horse I had, a large grey Turkoman which I had purchased.

During the day we had horse races just outside the town. Our fighting powers, however, were not put to the test, for on the second day we heard that the Turkomans had marched on to Geok Tepe, keeping just outside the Persian border. The Begler Begi was quite radiant, and I saw that a great weight had been lifted off his mind.

Though I had met and conversed with plenty of Turkomans both in Mahomadabad and Lutfabad, where there are numbers, I had never yet entered a real Turkoman village. The Begler Begi suggested that we should visit some of the villages within his border inhabited by Turkomans. We started the next morning. It was a fine day, and everybody seemed relieved by the impending attack from the Turkomans having been avoided. The whole plain was covered with high mounds, each one the remains of a fort or village, many of them crowned with ruins. Only a few of these places are now inhabited. The population of most of them have been carried into slavery or slain; as the escort of the Begler Begi said, "Every foot of this country is stained with blood." On the road we passed a piece of swampy ground where two years before the Begler Begi had attacked with 700 cavalry a party of 800 Turkomans led by his own cousin, Dowlut Murad Khan. The Turkomans after some fighting had fled, and in their flight had got into a swampy piece of ground, from which they were not able to extricate their horses; 250 were killed and 53 taken prisoners. The heads of the slain were skinned and the skins sent to the Shah, who pays a reward of five tomans (a little under 2*l.*) for the head of each Turkoman killed raiding within his frontier. The prisoners were ransomed for various sums—from 30 tomans or 11*l.* up to 100 tomans or 37*l.* I saw a few who were too poor to ransom themselves still in prison at Mahomadabad.

The largest and most conspicuous mound was called Khusru Purwez, and the town which formerly existed here was said to have been built by Khusru Purwez, who was king of Persia in A.D. 591. There were houses on it still, but I was told by the Begler Begi that these were quite modern, built within his own recollection. The place is deserted, as are so many others in the neighbourhood. It would be most interesting to dig here, but great difficulties would have to be overcome before that could be done, as there would be grave risk of capture by Turkomans if labourers remained at night, and the Persian Government is very jealous of all excavations.

A very large population must have formerly inhabited this rich plain, which is well watered and only requires peace to become most flourishing again.

The Begler Begi, finding it impossible for a Kurd or Turk population

to exist in these frontier villages, has persuaded a number of Tekke and other Turkomans to occupy the deserted villages along the border, and it was to some of these we were now bound. As we rode along we put up many pheasants from the thorny scrub we were passing through. I do not know the botanical name of the bushes, but the plant is called *jowassa* in India. One of the pheasants was pursued by three or four of our escort, and after the third flight allowed itself to be taken by hand. It was just like an ordinary English pheasant, but had a little white on the wings. The Governor told me that sometimes as many as 100 are captured in a day in this way.

We first visited the Turkoman village of Hissar, and then proceeded to Makdum, 11 miles farther, also a Turkoman village, where we halted to lunch.

The Turkomans, who never repair any buildings, were living among the ruins of the houses, some in regular alajaks made of felt, others in tents made of mats. I went into the tents; the women were dressed just like the Turk women of this part of the world, except that they did not wear a veil. They had a profusion of silver coins hanging round their necks. A very handsome carpet was spread for me, and I was begged to repose.

The tents are well worthy of description. They are composed of a framework of poles all round, with rods running to a central piece of wood like a cart-wheel. This central hole is intended for the escape of the smoke. The framework, which is easily taken to pieces, is covered with thick felts, a special piece being drawn over the opening at the top when it rains or snows. The fire burns in the middle of the floor; ropes pass over the tent and fasten it down to the ground. Outside, a strong piece of matting or a reed screen, known in India as a *chick*, is bound round as high as the walls to give stability to the whole. Those who have lived much in tents, as I have done, must remember what an inconvenience the pole in the centre of a tent is. In this kind of tent there is no pole in the centre; and all ridge poles, which are constantly breaking in ordinary tents, are also avoided.*

After spending a short time in the tents, I went and joined the Governor, who asked me to lunch. The meal consisted of pilaf of rice and boiled mutton. I wanted to go on towards Abiverd, but the Begler Begi declared we could not, as he was still afraid of Turkomans, and that we must get back to Lutfabad before sunset. Abiverd was nine miles off, and I took the bearings of it, also of the hill on which Kalat-i-Nadiri was situated, 42 miles off.

Close to Makdum is the Turkoman village of Kussowlie. We returned by another road, passing the Turkoman village of Mehni, not a Tekke village but inhabited by Turkomans from near Khiva; then through

* Two models of these tents, made on the scale of one inch to a foot, were exhibited by Colonel Stewart.

the rich land of the poor little village of Chilian. Here there were fine trees and gardens, although the village was most miserable. The poor people, who are not Turkomans, hardly dare move about for fear of capture, as Chilian is one of the most exposed places. We got back to Lutfabad before sunset.

Some Alhehli Turkomans have settled near Abiverd, and I saw a chief man of theirs who came to meet the Begler Begi, mounted on one of the best Turkoman horses I have seen.

Before leaving this place, I must say a few words about these horses. During the time that I resided in Daragez I examined several hundred Turkoman horses in my character as horse-dealer, as the Begler Begi permitted me to look over all his cavalry horses with a view to purchase. On various excuses, I purchased as few as I could, but was obliged to buy some to sustain my character.

These horses are not prepossessing at first sight; they are decidedly leggy, long in the back and long in the neck, but they improve on further acquaintance; and when the wonderful feats of endurance they can perform are seen one learns their true value. Most grossly exaggerated statements of the feats performed by Turkoman horses, however, are current.

I do not consider them fast; their best pace is a quick walk; they also have a long, cantering pace; they never trot. I have heard of their accomplishing the distance from Kala Kaushid Khan to Mash-had, about 200 miles, in three days, carrying all that the rider and horse required as food on the way; also from Kala Kaushid Khan to Khiva, 360 miles, in six days, doing the same. I have heard of a Turkoman horse covering about 100 miles in 24 hours, carrying his rider, body-clothing, &c. I believe a really good horse will do 60 miles a day for several days together, eating very little food; but anything beyond this is pure fiction. There are no milestones in the desert, and all Orientals are prone to exaggeration.

If I was asked to point out a distinguishing feature of the Turkoman breed of horses, I should say their greatest peculiarity was their hairlessness. They have naturally very little mane, and what they have is always carefully cut off. Their tails are generally scanty. The skin is very soft and thin, and the hair on it very fine indeed. If a patch of hair is rubbed off it only grows again very slowly, and if rubbed off more than once it often does not grow again at all. Bare, hairless patches are common, especially behind the saddle where saddle-bags are usually carried. They are never stabled, but picketed out in the open. The greatest care is taken of them, and they are well clothed. First a thick felt body-covering is put on, of the size an English horse wears; over this an immense piece of felt is fastened, covering the horse's ears and his whole body down to his hocks. This clothing is secured with a long roller, which is passed three times round the body.

However little clothing a Turkoman may take for himself, he always takes the full clothing for his horse; generally for himself he takes nothing but a long sheepskin coat, called a *poshtin*, and he will sleep even in snow with nothing but this. Certainly, Turkomans are a very hardy race, and when on their *alamans*, or raids, manage with wonderfully little clothing. Their horses, when in their *oubahs*, or camps, are fed on barley and chopped straw. On a foray they have nothing but the bushes or sometimes rough grass, which they can pick up; but some grain is always given them once a day. I made inquiries as to the barley-meal and sheep's-tail-fat balls which the Turkomans are said to give their horses. The people I saw were not accustomed to give their horses this mixture, but flour and sheep's-tail-fat, or clarified butter, are given all over the East to horses when required to support great exertion; so there would be nothing extraordinary in a Turkoman occasionally giving it. I myself, in India, have often given my horses a pound each of flour and coarse sugar and half a pound of clarified butter made into balls, when I have ridden them far and wanted them to go on again. This is, I believe, easily digested by the horse, and he is ready to start sooner than if a feed of corn is given him, and it is supposed to give great strength. The Turkoman horses are sometimes given an opium pill when they are required to make a great effort.

Turkomans give their horses almost anything they eat themselves. A Turkoman horse belonging to the Governor of Daragez, he assured me, would eat the boiled rice of a pilaf. This is rice over which melted butter has been poured. Though hardy in respect of food, the horses require a good deal of care as to clothing; their very fine coats and fine skins, when at all well bred, predisposing them to catch cold during the winter season.

The Turkomans, as a race, are very impatient of control, and have no regular chiefs for internal affairs, but in times of war and for external affairs they have chiefs who exercise a certain amount of power. In the Akhal Tekke country during the war almost despotic power was exercised by Mukdum Kuli Khan, he having even cut off the hands of people who disobeyed his orders.

All Tekke Turkomans, whether of the Akhal or Merv country, are divided into four clans, known as Wakil and Beg, Suchmuz and Bukshi. Tekke means wild goat. The word Tekke also is applied to the old he-goat that leads a flock of goats. The Wakil and Beg clans are collectively called Toctamish, as they are descended from a person of that name. The Suchmuz and Bukshi clans are collectively called Otamish, as their ancestor bore that name. In the Merv country the Wakil and Beg clans live on the eastern side of the Murghab; the Suchmuz and Bukshi on the western side. The Wakil and Beg are the two most powerful clans. The Wakils have the first right to the water from the Murghab. Their canal, or branch, of the Murghab from the dam at

Benti must be filled first. Each clan is divided into many families, and these families have each a person called a *khetkhoda* who acts for the family in matters of policy, but he can only act according to the wishes of the clan. I do not know the exact number of khetkhodas in the Merv country. I believe there are 24, but there may be more.

In some of the clans one family has rendered itself more powerful than the others. In the Beg clan the family of Kaushid Khan, who persuaded the Turkomans to unite to build the fort, have most power, and its chief representative is now Baba Khan, a son of Kaushid Khan. In the Wakil clan the family of Noor Verdi have rendered themselves most powerful; and while one son of his, Mahomad Yusuf Khan, is the most important person of the Wakil clan, in the Merv country his other son, Mukdum Kuli Khan, was the chief of the Akhal Tekke. In the Suchmuz and Bukshi clans there are several men of great nfluence, still no families have attained to such power as the families of Kaushid Khan and Noor Verdi Khan have in the other divisions. In times of danger the khetkhodas elect some person, who by family influence and determination of will obtains paramount power for a time, but Turkomans are too independent and free to allow him to retain it when the danger is past. Mukdum Kuli Khan, the chief of the Akhal Tekke tribe, was an instance of this supreme power being invested in an individual for a time.

At two long days' march from Kala Kaushid Khan is situated a settlement of the Salor Turkomans, called Yulutan, where there are some 4000 tents of that tribe, and a very imperfect dam over the Murghab; and five marches further up the Murghab, beyond the junction of the Kushk stream, is situated within the Afghan territory the chief settlement of the Saruk tribe, called Panj Deh, consisting of some 7000 tents.

The Saruk would act with the Tekke in any external affairs, but are not very friendly in ordinary times, as they have been ousted from some of their best lands by the Tekke. For some years there has been peace between these tribes.

I will now give a short description of the roads from Persia to the Merv country.

There are many roads. Firstly, the most northern road from Lutfabad to Kala Kaushid Khan, viâ Chungul, which is usually done by camels in eight days, but I have known a laden caravan of camels arrive even at Mahomadabad in six days; a second road goes by Mehna, in the Kalat-i-Nadiri district; a third by Kara Chacha, in the same district; a fourth is from Mash-had, viâ Sarakhs, to Kala Kaushid Khan, ten marches for laden camels.

All these roads are traversed by caravans, but are difficult, and from the Tejend river to where the first canal from the Murghab is reached, a space of some 85 miles has to be passed over, either without water at all, or on some of the roads there are wells of brackish water at about

66 miles after passing the Tejend. The only easy road to the Merv country, without constructing a canal, is from Herat and up the Kushk stream to its junction with the Murghab. In former days, Herat as well as Merv belonged to Persia, and this road was much used. Also in former days canals from the Tejend near Sarakhs ran out a long way into the desert and made the journey by Sarakhs a comparatively easy one, which it certainly is not now. There are still water reservoirs and caravanserais in ruins on this road, showing where the old road to Merv ran.

A canal which formerly existed, and which led from the Tejend river near Sarakhs to Kacha Kum, could easily be reconstructed. Kacha Kum is a halting place for caravans, and has several wells of brackish water. A canal can still be traced from the Tejend to this place, and in 1860 Hamza Mirza Hashmat-ud-Dowlah, the Persian general, employed his army for a few days in damming up the Tejend and turning it into the bed of the old canal. His efforts were successful, and the water ran for many miles in the bed of the old canal and supplied his army for several days. The water did not reach so far as it formerly did, but only to a place called Kurk Tepe, or the Wolf's Mound; still this was an immense assistance. A little more time and a little more engineering skill would no doubt have sent the water as far as it formerly went, to Kacha Kum, from whence it is only about 20 miles across the desert to the first canal from the Murghab.

I returned to Mahomadabad on the 2nd of January by a different road from that by which I came to Lutfabad, and on the 14th of January left Mahomadabad on my return journey to Mash-had. I never crossed the Persian border from Daragez, and only adopted an Asiatic dress that I might move about unrestrained and mix with the people freely. I returned by Nishabur, Subzawar, Teheran, and the Caspian Sea to England, which I reached on the 24th of April, passing Baku on my Caspian route.

Baku, which I remembered as quite a small place, has now more than 30,000 inhabitants, and it has, I believe, a great future before it. The unlimited supply of petroleum, which is here found, is a mine of wealth. As soon as railways are made I believe that Baku will supply the world with petroleum. The price is now only a halfpenny per pood of 36 lbs. on the spot, and the supply is practically unlimited. All the steamers on the Caspian already use it as fuel instead of coal, and I believe the use of petroleum as fuel will soon be extended to the railways also. Some locomotive engines already burn petroleum.

In introducing the author of the paper, the PRESIDENT said the journey described was not the first visit that Colonel Stewart had paid to those regions; but he had now the advantage of bringing home information regarding a country which at this moment was of very great interest. It was sometimes said that almost the only benefit war conferred upon the British tax-payer was that it enlarged his knowledge

of geography; and doubtless, during the last year or two, while the Tekke Turkomans had been engaged in opposing the gigantic power of Russia, a great deal more interest had been felt in their history and country than formerly. Of course they were an interesting people, as all were, who were struggling for independence; but at the same time they were not desirable as near neighbours, so long as they preserved their present customs. Between thirty and forty years had elapsed since any Englishman had traversed the Tekke Turkoman country.

The following discussion ensued on the termination of the paper:—

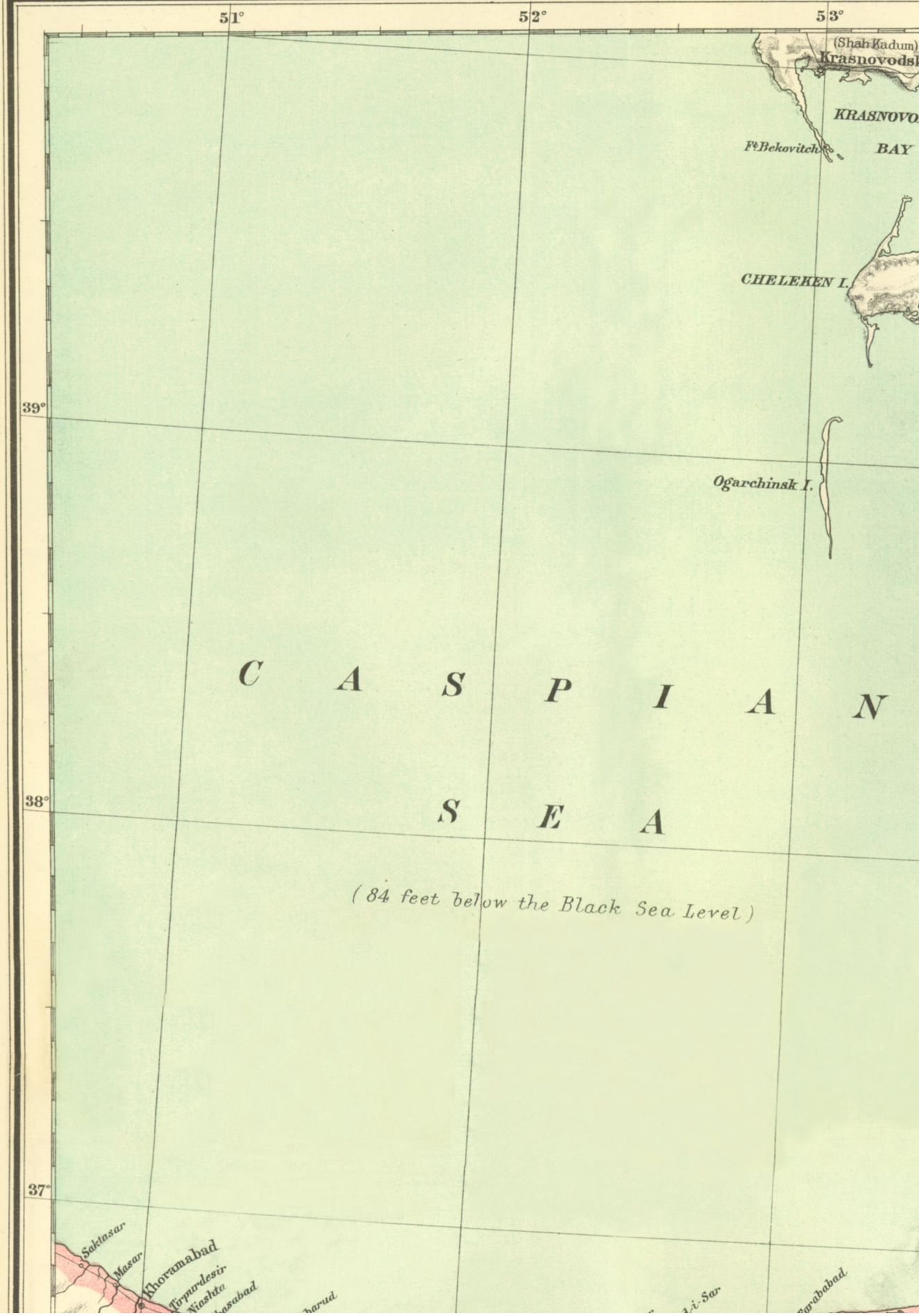
Sir Henry Rawlinson said that, in common with all geographers, he felt greatly indebted to Colonel Stewart for the additions he had made to our knowledge of the geography of Persia, and for the skill and courage he had shown in travelling in that part of Asia. He himself had never travelled among the northern mountains of Khorasan—only along the southern route; but he had studied the country very carefully and was tolerably well acquainted with both its ancient and its modern condition. "Daragez" meant "The Valley of Tamarisks," *gez* being the name of the ordinary tamarisk bush. He supposed, therefore, that that bush was common there. But Daragez or Deregez was not an ancient name, dating only about a hundred years back. Formerly, it was part of the great territory of the Parthians. The Turkomans were the descendants of the Ghúz or Komani—a race of Turks who had penetrated all the way from the East of Asia through Persia and even as far as the Danube. In fact, very recently a vocabulary of their language had been published which was compiled by Petrarch in the 14th century, and it was very good Turkish of the present day. The Turkomans were not only to be found in the desert between the Caspian and the Oxus, but remnants of the old Turkoman settlements were met with throughout Asia Minor, Syria, and Persia, and a few even were found in Afghanistan. He wished to call attention to one important fact which he had mentioned before, but which could not be too often repeated, namely, that this country of the Akhal Turkomans in ancient times was one of the richest in Asia, because the southern branch of the Oxus (*Ochus* of the Greeks) flowed through it. The bed of that river had been traced by the Russians from the modern Oxus, above Charjúí, to the wells of *Igdi*. It was also heard of by Major Napier and, he believed, by Captain Gill and Colonel Baker, who travelled in the same country. When that river was running, the whole of what was now desert formed one of the richest parts of Asia. It was the home of the Nisæan horses, which took their name from the town of Nissa, near Askabad. It was the cradle indeed of the Parthian race; for the Parthians were not mere desert warriors, but possessed a very fertile country; and it was from the strength of these resources that they were able to conquer all Persia and found the great Parthian Empire. What Colonel Stewart had mentioned about the Christians was rather curious. There were, no doubt, a great number of Christian settlements thoroughout Khorasan up to the 14th century. The Nestorian annals were full of notices of monasteries and bishoprics in that country, and no doubt the various *kílissehs* that Colonel Stewart had alluded to were remnants of the Christian churches belonging to Nestorian congregations. Colonel Stewart had been so careful to respect the rules of the Society which excluded the discussion of politics that he had purposely omitted some circumstances which would be of great interest, and which, in discussing a geographical question like the present, could not be avoided altogether. He had mentioned that a railway had been opened from Mikhailovsk Bay towards Kizil-Arvat, which would go on to Bami, the capital; but it could not be supposed to stop at Bami. It was in reality the first section of a line which would some day join the Caspian and the Indus, meeting the English line by Candahar and Herat. He wished to ask Colonel Stewart what information he had

obtained about the continuation of that line. It was easy enough along the Atock to Askabad, and then by Daragez to Sarakhs; but from Sarakhs the line would follow the river to Herat along a track which was now uninhabited. That was the natural run of the country; and as in ancient times the high road ran through that district, there could not be any physical obstacles. He might add that in former days, from Sarakhs there were two great routes leading southward, one up the Tejend to Herat, the other circling round the desert across the Murghab and then along the skirts of the hills by the ancient towns of *Talikán* and *Fáriáb* to Balkh. Along both those lines there was a series of caravanserais for travellers, and he presumed that their ruins might still be seen. The country was no doubt at present uninhabited, possessing, however, abundance of water, with tamarisk jungle and other vegetation. Any information that Colonel Stewart had picked up on the subject would be of very great value. Some ten years ago a traveller was sent by the Government of India through those countries. His report had been printed, but never published. His name was Daood Khan. Part of the routes that Colonel Stewart had alluded to were actually traversed by that man. First he went from Sarakhs to Merv, and so on to Charjúí. Then he came back to Sarakhs, made a circle in Khorasan, and returned by Kelat to Kara Chacha; from whence he crossed the Tejend, and, stopping one day in the desert, on the second day he reached Sháhidlí, and from there went on to Tash-Robat and Merv. He only spent one day in the desert, and that verified the information which Colonel Stewart had received from the people of the country. Colonel Stewart's remarks about the canal running from Sarakhs along the road towards Merv were of great interest. M. de Blocqueville, a French photographer who accompanied the Persian army when it advanced on Merv, and who was taken prisoner by the Turkomans, described the canal as having water flowing through it at that time, but he believed that at present it was perfectly dry, and there would be some difficulty in turning the water into it again, for the bed would require to be thoroughly cleaned out. Among the last blue-books presented to Parliament there was a very interesting despatch from the Russian Foreign Office that contained a remarkable phrase, in which blame was imputed to certain English officers who, it was said, were "haunting" the desert, as if that was rather a discreditable proceeding. Now, in Colonel Stewart's paper the Society could see the results of such "haunting," and he only wished that other inaccessible parts of Asia were "haunted" in the same manner. So far from its being a discreditable proceeding, it appeared to him to be deserving of the highest commendation. The greatest credit, indeed, was due to Colonel Stewart for his services not only in bringing back geographical details, but in giving the Society a general view of the present condition of the country. For his own part he must say that he had derived the greatest pleasure and much instruction from the very interesting paper which had just been read.

Captain Gill said the regions described in the paper had been "haunted" more or less by officers during the last ten years. In early days there were several travellers in these districts, but about twenty or thirty years ago everybody seemed to go to sleep, with regard to the whole of the country, and no one appeared to take any interest in it until awakened by Colonel Valentine Baker. It was that officer who invited him (Captain Gill) to accompany him, and that was how he first came to travel in that part of the world. They went to Mash-had and travelled throughout the whole region. It happened that last December he (Captain Gill) was on the road up from the extreme south through Persia. When he arrived at Mash-had he found an English officer there, Colonel Stewart, and they spent a few pleasant days together. It might well be asked what induced so many travellers to

go into those countries and "haunt" those inhospitable deserts. Of course the whole interest of the thing was centered in the district of Merv and its strategic and geographical position, for it could not be concealed that not only was the place interesting from its geographical position as having been the cradle of the Parthian race, but it was also interesting from its strategic position as connecting the line of Russian advance by the Oxus with that by Kizil-Arvat and North-eastern Persia. It was that which induced English travellers to go wandering about in those places. For his own part, he did not think that the Russians had any intention of travelling to Merv at present. If they pushed on their railway, their line of advance was by Sarakhs or Mash-had direct to Herat. Still, the importance of Merv as a strategic point must not be overlooked. With regard to the Turkomans and the Persians, no one could doubt that the Russians had done a great deal for the Persians in freeing them from the scourge of the Turkomans; no one could question that the Turkomans had committed great cruelties and done a great deal of injury to Persian people. He had been very much struck by the condition of the watch-towers and of the village walls in the district within a hundred miles of Mash-had. These towers had no doors, but were provided with a rope ladder, and when the owners heard that the Turkomans were coming, they would climb to the top of the tower, draw up the ladder and wait till the marauders were gone away. All the villages had mud walls around them, with towers at the corners and strong gates which used always to be closed at night; but during the last few years the watch-towers had been tumbling into ruins, and the people, instead of living in their villages, were building their hovels outside, the villages themselves being often little better than a heap of ruins. Their houses were like bee-hives in shape, made of mud. The reason why the people were thus living outside the villages was that they no longer feared the raids of the Turkomans. Whatever objection might be felt to Russia advancing to India, the fact could not be denied that the Russians had done a great deal of good to those countries on the borders.

The PRESIDENT said every one present must feel the great advantage of being brought face to face with enterprising travellers who came to narrate their adventures to the Society. He wished to say one word about the exclusion of political subjects from the discussions. He was not at all in favour of such exclusion, for such questions added another subject of interest to those more immediately connected with the meetings. What, however, he wished to avoid was the intrusion of mere party politics. Those political considerations in which all were equally interested never could be excluded. From that point of view, looking at the subject which had been discussed, the conclusion he arrived at with regard to the Turkomans and their proceedings, after hearing the most interesting account given by Colonel Stewart, was that, acting upon the Christian principle of doing unto others as we would they should do unto us, the best thing he could wish for all their neighbours was that the Turkomans should be removed into a country where they would have no neighbours. They must be improved, and if it could not be done in any other way, it would be for the benefit of humanity if they were removed off the face of the earth.




MERV
TEKKE
Ketcheli
Kizil dar Camels
Mahmur to Merv
Kumi Yap
Bukuz (W.)
Chungul
Yol Airti
Dash Robat
Kacha-Kum
Shaitli (W.)
Tejend R.
Dushakh
Dashtalung
Haoz Abdulla Khan
Shur Kulla (Sp.)
(Ruins)
Mehna
KALAT-I-NADIRI
Imarat-i-Nadiri
Kuh Khisht
Big Gumbaz
Kangali
Mashad to Merv 9 marches for camels
Kara Chacha
Chacha
Arti-kala
Kal Haoz
Khaur R.
Kara Dagh
3800
Takka Khana
Amirabad
Sarakhs
(Persian Fort)
Heins
Yedaji
Sunduk Shikusht
Kandukli
Deulatabad
Gumbazli
Sharukh
Naorozabad
Mozdaran
Robat i Mahi
Char Gumbaz
Karabokah
Kuzkan
Kashaf Rud
Bughbaghu
Ak Darband
Shorchah
Pul-i-Khatun
Pusht-i-kuh-i-Jam
Plateau
Kous Ambar
Barash
Faraidanband
Suleymani
Sangbast
Tangalshur
Ramzan Beg
Baz Haoz
Sharifabad
Shah Tuggi
Kariz Zamch
Kafir Kala
Robat Safid
Godar Mahmad Mirza Pass
6450
Kala Shazada
Miandasht
Kala Nao
Kalandarabad
Kali-Minar
Taimanak
Abdulabad
Hamitabad
Langan
Turbat-i-Shaikh Jami
Jam R.
Turbat-Hidari
Hasanabad
Shahr-i-Nao
BAKHARZ
Abbasabad
Mosinabad R.
Mashad i Reza
Taman Agha
Kehriz
Kafir Kaleh
Kusan
Tirpul
Shabash
Rosana
Sang i Dukhtar
Ghurian
2150
Kerat Pass
Khaf 2710
Gishti
Salama
Paindeh
Luj
Asadabad
Binurgh
Naudpishan
Janatabad
Nasirabad
Chamanabad
Mehdiabad
Kushiar
Jafrabad
Sangun
Mahmudabad
Hindabad
Faizabad
Asadabad
Muhammad
Shah Ambar
Deh Nao
Godja
Hariabad
Kajaruck
Hadjiabad
Askaut
Nye
Daulatabad
Shadmian
Mamuras
Abbasabad
Dehshaikh
Shahabad
Adak
Bymiran
Delavud
Sultanabad
Shahr
Godar
Kesh
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Fozabad
Mahmudabad
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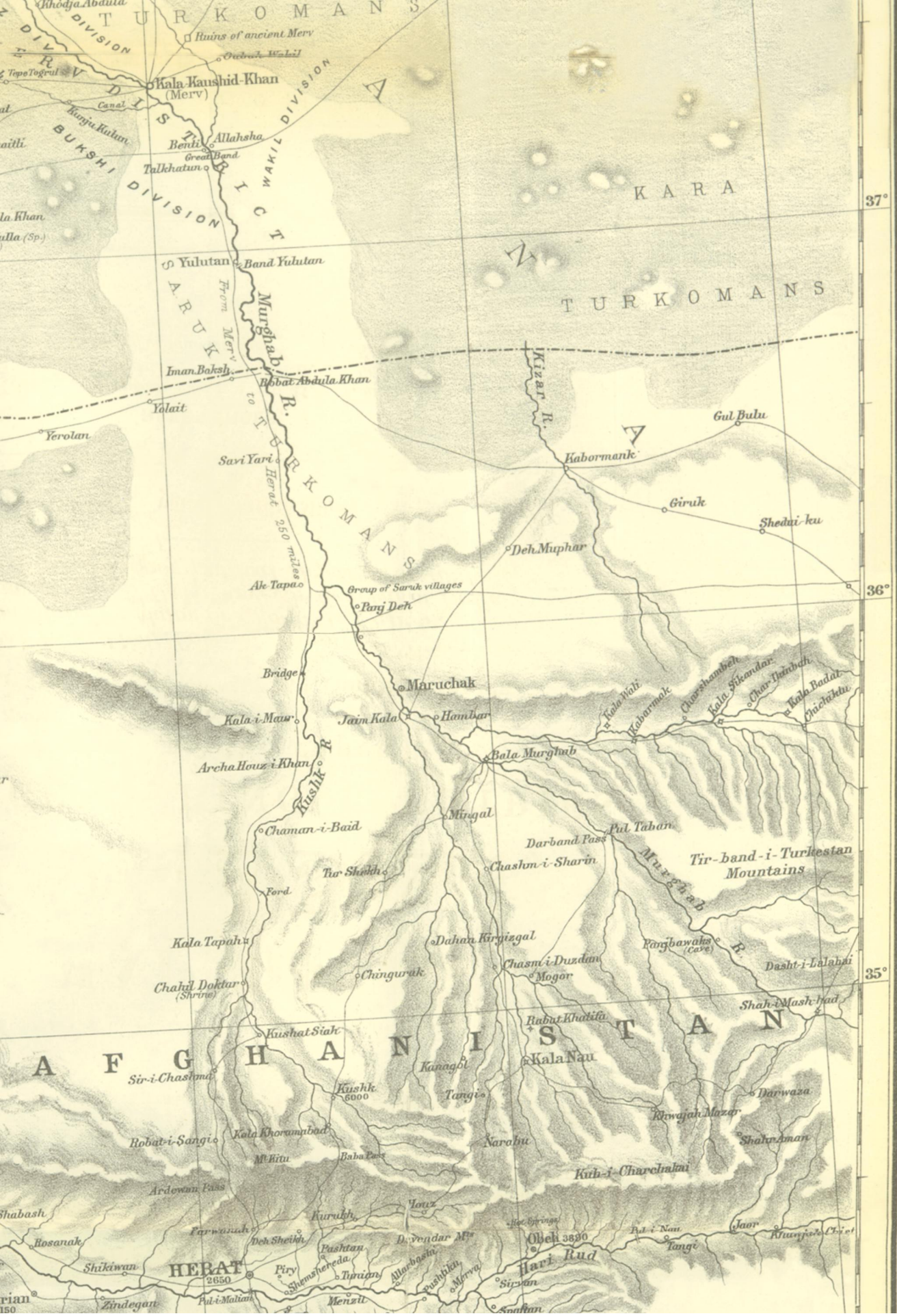
Faizabad
Askand R.
Z
Kara Kuh
Hari Rud
Jam R.
Tejend R.
Kara Kum
Kara Kum
Kara Kum



H. Sharbau, R.G.S. del.

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LIEUT. COLONEL C

Compiled from
from Maps
Major General J.
and the Russia

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MAP OF

ORASAN,

GHBOURING COUNTRIES,

illustrating the Paper

by

ONEL C. E. STEWART, 5th Punjab Infantry.

d from Lieut. Colonel Stewart's Survey,
Maps by Major the Hon^ble G. Napier,
eral J. T. Walker, Surveyor General of India
Russian Topographical Department, 1881.

Scale of English Statute Miles.

50 100

REFERENCES.

h. — *Mountain*
oz or H. *Tank*
ardeh. *Group of four Villages*
— *Caravansarai*
W. — *Well*
B. — *Bay*
L. — *Lake*
Sp. — *Spring*
St^n. — *Station*

Edw^d Weller, *Litho. Red Lion Square.*